## Violent Behavior

This editorial argues that violent behavior is a type of behavioral pathology that should form a legitimate diagnostic category. Before addressing that topic, however, some facts pertinent to the current concern over violence require clarification. We are inundated daily with an endless series of reports of interpersonal violence. Murder, assault, rape, spousal violence, child abuse and suicide fill the media, promoting the idea that violence is spreading from urban ghettos to suburban and rural quiescence. The picture is one of exploding mayhem with no sanctuary; of a society in desperate straits, teetering on the brink of anarchy. Opinion polls, political rhetoric, and judicial severity all reflect this perception. Yet, with the exception of a few definitionally ambiguous surveys (in which sexual assault is defined to include leers, jokes, etc., and specific populations such as young ethnic males), actual rates of violence have recently fallen, albeit marginally. For example, in the United States commonly portrayed in the media as a bastion of violence aggravated assault dropped by three percent, forcible rape by six percent and murder by two percent during the first six months of 1994. These statistics are to be expected given that young males, responsible for the largest portion of violent crime, have become a smaller percentage of the general population (a fact soon to be reversed). Nevertheless, fear and concern about violence are at all time highs, and are seemingly growing. Fear of violent crime repeatedly predominates in opinion polls as one of the top societal issues. These polls also reveal that those people least likely to be victims of violence are the most concerned and unwavering about it. Young males are the least concerned and most likely victimized, while elderly women are the most fearful and the least likely victimized (Forde 1993). This paradox may be the result of the eternal optimism (or stupidity?) of the young, and/or of the high consumption of the media by the elderly. Even brief exposure to media images will lead the elderly to believe in the omnipresence of violence. The Economist (1995) recently put the situation in perspective when it reported that in Great Britain, where violence is of greater concern than unemployment, inflation, or the state of health services or education, one is almost as likely to choke to death on one's meal as one is to be a victim of murder.

Regardless of statistics and real or imagined fears, syndromes of violent behavior belong in any classification of

behavioral pathology. Some should have appeared as independent disorders in the DSM-IV. The definition of an abnormality which guided the current system can be paraphrased as "a clinically significant behavioral or psychological syndrome, that is associated with distress, disability or impairment, (i.e., increases risk of death, pain disability or loss of freedom) which arises from within the individual and is not an expected or a culturally sanctioned response." (American Psychiatric Association 1994). Violent behavior clearly satisfies parts of this definition such as "significant" and "increased risk of death, pain, loss of freedom." "Clinically significant" also seems nondebatable, particularly given the frequency with which violent behavior serves as a reason for treatment, and as a factor modifying diagnosis and form of treatment. Studies from many countries concur that displayed aggression toward others or oneself and fear of aggression are major reasons why patients come to, or are brought to, psychiatry. In a recent study of adults from Québec, 83% of involuntary admissions and 41% of voluntary admissions were preceded by violent or intimidating behavior (Moamaï and Moamaï 1994). The statistics are even more striking for children (Van Moffaert and Vereecken 1989).

Insofar as treatment is concerned, the history of psychiatry is replete with examples of interventions such as prefrontal lobotomies, early use of bilateral ECT and megadosing with major tranquilizers which all gained acceptance less for promoted theoretical reasons than for the increased ease in the management of violent patients that resulted. The level of aggression also seems to influence diagnosis. One study (Lapp et al 1980) looked at how the sex of patients and the level of aggression influenced diagnosis and treatment. Actors performed equivalently scripted scenes from a diagnostic interview under aggressive (verbal and gesture) and nonaggressive conditions. Psychiatrists viewing the tapes diagnosed aggressive "patients" with more serious pathology than nonaggressive "patients," and recommended differential treatment. Such diagnoses were particularly common for depressed female patients whose aggressive responses increased the chances of their being labelled with a personality disorder or psychosis. Their level of aggression also resulted in a 40% increase in the physicians' recommendation to use anti-psychotics. In contrast, aggressive males were often seen to be suffering from a transient situational disturbance and anti-anxiety agents were usually recommended.

More debatable aspects of the definition of abnormality as it pertains to the inclusion of violence as a syndrome derive from the criteria of "within the individual" and "not an expected or a culturally sanctioned response." The latter criterion illustrates that there is an obvious ambivalence toward violence. It is acceptable and even idealized under some conditions, but considered reprehensible under others. Furthermore, although violent behavior may be essential to or designed for the achievement of a goal, it can also be retaliatory. This ambiguity does not, however, prevent the inclusion of violent behaviors in any classification of behavioral pathology as other disorders contain similar characteristics such as socially sanctioned and pathological religious delusions.

The former criterion is supported by a growing literature which demonstrates the significant role of biological factors in the expression of aggression. Four current reviews of the literature (Buikhuisen 1987; Kandel and Freed 1989; Moffitt 1993; Pennington and Bennetto 1993) agree that certain cognitive impairments are implicated in the regulation of aggressive behavior. There is also substantial evidence that the nature of these impairments is similar to those often seen in brain damaged/lesioned frontal lobe patients. Moreover, aggression is often a stable trait. A recent review (Mossman 1994) reanalyzed data from 44 published studies, controlling for behavioral base rates, and showed both short and long term predictability of aggression. Past behavior seems to be a better predictor of aggression than clinical judgement. In our own work (Tremblay et al 1994), we have shown that aggressiveness and personality traits of impulsivity, anxiety and reward- dependence, assessed at age six, predicted delinquency at ages ten through 13. Other longitudinal studies have reported similar predictability. For example, Moffitt (1993) has studied and discussed a consistent pattern of antisocial behavior that differs from the far more frequent form of antisocial behavior limited primarily to adolescence. Individuals with this trait exhibit antisocial behavior throughout their life span, from preschool to middle age. They comprise four to six percent of subjects with antisocial behavior, are recurrently problematic, and from adolescence on, are recurrently violent. Cognitive impairments seem to occur in this group in particular. This typology offers potential etiological and predictive validity, certainly well beyond that seen in many DSM-IV disorders.

The role of serotonin and other neurotransmitters in violent behavior is also being more widely examined. While the exact contributing mechanisms are not understood, lowered brain serotonin correlates with violent suicide, and aggressive and impulsive behavior. When compared with controls, individuals with violent histories, impulsivity, alcohol abuse and family histories of alcoholism have all been found to have lowered cerebrospinal levels of the serotonin metabolite, 5-hydroxyindoleacetic acid (Linnoila and Virkkunen 1992).

It is clear from these results that some of the variance in violent behavior is attributable to "from within" characteristics. Like every other form of pathology in the DSM-IV, such contributions are not exclusive, and depend to varying degrees on interactions with experiential and situational determinants. The tendency to see causality for pathological behavior as exclusively biological or environmental is, unfortunately, too common. Although it would seem that the demise of the nature-nurture debate is inevitable given the current emphasis on the biopsychosocial model in psychiatry, news of its death appears, unhappily, to be greatly exaggerated. Absurdly, specific genes and low socio-economic status are still proffered as simple explanations for complex behaviors which stem from multi-dimensional interactions.

Also problematic, and quickly becoming as predictable as death and taxes, are the emotional paroxysms surrounding any suggestion of biological causes of social problems. These reactions occur with some historical validity, and tend to come from self-protective politically sensitive interest groups and the socially concerned. Numerous interest groups have already demonstrated their fierce political opposition to suggested diagnoses featuring violent behavior. Their tirades over the proposed "sadistic personality disorder" are a prime example. They tend to argue that a medical diagnosis is tantamount to an explanation or excuse for a behavior for which there is no acceptable rationale. Furthermore, they contend that if a rationale for violent behavior is provided. particularly a biological one, it obviates the law designed to assign punishment and retribution. To those people who believe that violence should be condemned, this is an unacceptable message. The crux of the issue is the uneasy relationship between individual responsibility and scientific determinism which has and continues to vex historical and modern thinkers, and represents the current Scylla and Charybdis of modern society. Notwithstanding the resultant philosophical and legal dilemmas, the question of what is disordered behavior remains. Classification systems of psychopathology cannot be influenced by perceptions of what is "politically incorrect" or by considerations of the legal problems they might cause. Nor can these systems be determined by social concerns raised by those who recall the all-toofrequent tendency of treatments for behavioral disorders to be fad-driven, often to the detriment of patients and selected groups in society. Ironically, one congressional panel investigating "modern" psychosurgery, which was pilloried by the predictable "nattering nay-bobs of negativism" as a means of suppressing blacks, actually found that blacks were excluded from what were judged to be useful but limited procedures. Classification systems exist for scientific reasons. If we are ever to focus appropriate attention on this significant, but perhaps somewhat overstated, topic of violent behavior, separable typologies are required. Misuse of words is unfortunate; nonuse is unacceptable.

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